

REMARKS

The present application was filed on January 23, 2004 with claims 1 through 16. Claims 2 and 14 were cancelled in the Amendment and Response to Office Action dated December 23, 2008. Claims 1, 3-13, and 15-16 are presently pending in the above-identified patent application.

In the Office Action, the Examiner objected to claim 1 due to an indicated informality, rejected claims 1, 3, 8, 10, and 11 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter, rejected claims 1, 3, 10, and 13 under 35 U.S.C. §112, second paragraph, as being indefinite, and rejected claims 1, 3-13, 15, and 16 under 35 U.S.C. §102(b) as being anticipated by Takaragi et al. (United States Patent Number 6,141,421).

The Examiner is thanked for the courtesy of a telephone interview on March 25, 2009, where the Examiner agreed to enter an Examiner's amendment and allow the amended claims.

Formal Objections

Claim 1 was objected to because " v_{i+1} " should be printed in a more readable form.

The Examiner's amendment will amend claim 1 such that the term " v_{i+1} " may be printed in a more readable form.

Applicant respectfully requests that the formal objection be withdrawn.

Section 101 Rejections

Claims 1, 3, 8, 10, and 11 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. In particular, the Examiner asserts that, while the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Applicant notes that the Examiner's amendment addresses the section 101 rejections and respectfully requests that the section 101 rejections be withdrawn.

Section 112 Rejections

Claims 1, 3, 10, and 13 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite because (a) the definition of u_i and v_i are never recited and defined in the claim,

and (b) omitting essential elements since, according to the specification (page 5, lines 13-17), the recited claim limitations are valid only under the condition of $\text{gcd}(s, n) \neq 1$.

Applicant notes that the Examiner's amendment addresses the section 112 rejections and respectfully requests that the section 112 rejections be withdrawn.

Independent Claims 1, 3, 8, 10, 11, 13 and 15

Independent claims 1, 3, 8, 10, 11, 13 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by Takaragi et al. Regarding claims 1 and 13, the Examiner asserts that Takaragi discloses generating a compressed Rabin signature based on a continued fraction expansion of s/n (col. 14, lines 21-32, and col. 15, lines 9-15). Regarding claims 8 and 15, the Examiner asserts that Takaragi discloses applying a message formatting function, h , to the message, m , to computing $h(m)$ (col. 10, lines 27-50); computing a value, t , as $h(m)v^2 \bmod n$ (col. 10, lines 50-65; and col. 14, lines 32-57); obtaining a value, w , as a square root of the value, t (col. 11, lines 1-24); and computing a signature value, s , as $w/v \bmod n$ (col. 11, lines 1-24).

Applicant notes that the Examiner's amendment addresses the section 102 rejections and respectfully requests that the section 102 rejections be withdrawn.

Conclusion

All of the pending claims following entry of the Examiner's amendments, i.e., claims 1, 3-13, and 15-16, are in condition for allowance and such favorable action is earnestly solicited.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

/Kevin M. Mason/

Date: May 1, 2009

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